

Ergonomic Case Study



Cross-Overs & Work Platforms

The world's largest glass bottle manufacturer needed a solution to the challenges they faced when accessing conveyors, palletizers and other bottle making equipment. Owens-Illinois engineers listed their requirements for safe work platforms to access equipment at their state of the art manufacturing facility in Colorado.

Conveyer & Caster - Equipment for Industry designed and fabricated each of the structures to meet their criteria:

- Exceed local and national building codes.
- Use a walking/work surface that is safe and comfortable for operators when standing for long periods of time.
- Bolt together construction. No welding or on-site fabrication of components. Modular design to meet on-site changes.
- Provide easily removable handrail to move job boxes and maintenance equipment across the platforms.
- Design a seamless floor system to prevent foreign objects from falling into open glass bottles.



Our engineers started with a steel substructure to support 150 pounds per square foot load capacity. Polyurethane coated plywood was used as the walking surface, to provide a durable, easily cleaned and comfortable work surface. The modular handrail and kickplate assemblies were designed to fit tightly to the poly-plywood floor, creating a barrier to eliminate small objects from falling on to the conveyor and into the bottles

During the design process, Owens-Illinois realized the benefit of providing a safe, comfortable work platform along the inspection areas. Conveyer & Caster designed a 6" high work platform that attached to the crossovers (photo left). Operators working along the platform can perform quality control and spot defects while working on a comfortable surface. This reduces operator fatigue, improves safety and keeps the areas cleaner than the floor matting generally used in bottling operations.

Closed stair treads and risers were used on each stairway to meet building codes, as well as provide safety and cleanliness. The treads are made of checkered steel plate for durability. Tabs and fasteners were provided to attach the platforms to the concrete floor.



Owens-Illinois and their customer Anheuser-Busch, demand the highest quality products at competitive prices. Conveyer & Caster - Equipment for Industry is proud to be an integral part of this world-class manufacturing partnership.

Conveyer & Caster - Equipment for Industry

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